

ABOUT THE BOOK

This book has come out of thirty years of teaching experience of Dr. A.S.N. Murty, the first author, at Berhampur University and a powerful thought and research output of Dr. V.S.N. Murty, the second author, with an equal years of research experience at the National Institute of Oceanography (Council of Scientific and Industrial Research, Government of India), Goa. As many titles in this subject are by foreign authors and Indian students are finding it difficult to procure them due to high cost and on the request of the students, the thought of writing a book on physical oceanography came. This book has taken the present shape from the lecture notes prepared during teaching which has been updated up to the recent inventions, particularly, keeping the examples from the Indian Ocean. Generally, many foreign books on this subject lack the examples from the Indian Ocean studies so it is not much of interest to Indian students. This book is prepared keeping the Indian students in mind. This book will be of immense help to the students, in general, and researchers of Marine Science, Oceanography and Meteorology, Atmospheric science, Fisheries, Marine Biology and other allied disciplines, in particular. As all the necessary fundamental principles together with the studies from the Tropical Indian Ocean are incorporated, this will meet the requirements of not only the beginners in Oceanography but also useful as a ready reckoner to all the scientist community.

This book contains seven chapters. Though chapters I & II are introductory chapters, they are bifurcated to give an emphasis on *International Indian Ocean Expedition* which is an important topic that every student need to know, in detail, as it is considered to be the beginning of Indian Ocean oceanography. Third and fourth chapters discuss about the *dimensions and physical properties of sea water*, in general, which are needed to understand the other chapters. While chapter V discusses about the *distribution of physical properties* in the oceans, extensive discussions were made for these distributions for the case of Indian Ocean. Chapter VI deals with the *heat budget* of the oceans with an emphasis on the Indian Ocean. The last chapter, chapter VII, deals with extensively on the *water masses and circulation in the Tropical Indian Ocean* which is the center topic of the book. Also *preface, large number of references, glossary and index* are appended for identifying certain important terms or definitions easily by the reader. As the syllabi of most of the universities imparting degrees in Oceanography, Meteorology or Marine Science contain these topics in the first year, this book will definitely help the student in giving up-to-date information for the examination point of view. In continuation of this elementary book an advanced book is also proposed to be brought out shortly to give the reader a full fledged knowledge in physical oceanography.